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Notice of Allowability	Application No.	Applicant(s)	
	10/658,332	FUJISHIRO, YOSHIYA	
	Examiner	Art Unit	
	Allahyar Kasraian	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the patent application filed on 09/10/2003.
2. ☒ The allowed claim(s) is/are 1-3.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>20070329</u> . |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date <u>09/10/2003</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with **Mark Thronson** on March 29, 2007.

The application has been amended as follows:

In the Title

The title has been changed to **--Synchronizing Clock Signals of Server and Client Devices in a Network System Based on Power Source Synchronous Pulse Signal--**.

In the Abstract

On lines 6 and 7, "data.

Therefore, in the network system in which the client device" has been replaced with --data. Therefore, in the network system in which the client device--

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement submitted on September 10, 2003 been considered by the Examiner and made of record in the application file.

Allowable Subject Matter

4. **Claims 1-3** are allowed.
5. The following is an examiner's statement of reasons for allowance:

Consider **claims 1-3**, the best prior arts of record found during the examination of the present application, **Xu (EP 0987894 A2)** in view of **Martinez (U.S. Patent # 4,908,600)** fail to specifically disclose, teach or suggest a network system comprising a server device for transmitting audio information or video information and a client device for receiving the audio information or the video information transmitted from said server device, wherein said server device counts the number of clock pulses of a server clock signal used to encode the audio information or the video information on the basis of a power source synchronous pulse signal synchronized with the power source frequency of electric power supplied to the server device, and outputs information showing the counted clock pulse number to the client device; and said client device receives the information

showing the clock pulse number transmitted from said server device, and counts the number of clock pulses of a client clock signal used to decode the audio information or the video information on the basis of a power source synchronous pulse signal synchronized with the power source frequency of electric power supplied to the client device, and the frequency of said client clock signal is conformed to the frequency of said server clock signal on the basis of the difference between the clock pulse number received from said server device and the counted clock pulse number.

Xu clearly shows a real-time transmitting and receiving of audio or video information, which is encoded at a server and decoded at a client, and a method for clock variation compensation by shifting each data packet to synchronizing buffer and the clock synchronization between client and server is achieved by a synchronizing whose half size position is taken as a reference, and by monitoring the movement of the buffer fill position over a given period, the drift rate of clock unsynchronization between client and server can be derived and, therefore, the client's clock can be adjusted to synchronize with the server's clock based on the derived drift. However, Xu fails to anticipate the use of counting the number of clock pulses of a server or client clock signal used to encode or decode the audio information or the video information on the basis of a power source synchronous pulse signal synchronized with the power source frequency of electric power supplied to the server or client device.

Martinez clearly shows a transmitting (server) device and a receiving device are both phase locked to the frequency of a power line signal either by direct connection or a frequency voltage induced into a radio device from a nearby power lines to thereby provide means to precisely synchronize the transmitting device radio carrier signal and/ or digital clock stream with the receiving device to achieve very high signal transmission reliability. However, Martinez fails to anticipate the use of transmission of audio or video information, which is encoded at a server and decoded at a client, and also the use of counting the number of clock pulses of a server or client clock signal used to encode or decode the audio information or the video information on the basis of a power source synchronous pulse signal synchronized with the power source frequency of electric power supplied to the server or client device.

Therefore, **claims 1-3** are considered novel and non-obvious and are therefore allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

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6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. **Enari (U.S. Patent # 6,747,998 B1)** discloses Transmitter for Multichannel Digital Data and Transmission Method
- b. **Shuttleworth (U.S. Patent # 7,043,313 B1)** discloses Clock System Capable of Synchronizing Clock Frequencies of Power Processing Devices and Digital Signal Processing Devices
- c. **Litwin, JR. et al. (U.S. Patent Application Publication # 2002/0140547 A1)** discloses Clock Synchronization over a Powerline Modem Network for Multiple Devices
- d. **Kishigami et al. (U.S. Patent # 5,787,132)** discloses Data Communication System Having Improved Synchronization Capability

7. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

8. Any inquiry concerning this communication or earlier communications from the

Art Unit: 2609

Examiner should be directed to Allahyar Kasraian whose telephone number is (571) 270-1772. The Examiner can normally be reached on Monday-Thursday from 8:00 a.m. to 5:00 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rafael Pérez-Gutiérrez can be reached on (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 571-272-4100.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Allahyar Kasraian
A.K./ak

March 30, 2007


RAFAEL PEREZ-GUTIERREZ
SUPERVISORY PATENT EXAMINER

3/30/07

DETAILED ACTION

EXAMINER'S AMENDMENT

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Authorization for this examiner's amendment was given in a telephone interview with **Mark Thronson** on March 29, 2007.

The application has been amended as follows:

In the Title

Change the title to **--Synchronizing Clock Signals of Server and Client Devices in a Network System Based on Power Source Synchronous Pulse Signal-**
- instead of "Network System".

Priority

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conformed to the frequency of said server clock signal on the basis of the difference between the clock pulse number received from said server device and the counted clock pulse number.

Xu clearly shows a real-time transmitting and receiving of audio or video information, which is encoded at a server and decoded at a client, and a method for clock variation compensation by shifting each data packet to synchronizing buffer and the clock synchronization between client and server is achieved by a synchronizing whose half size position is taken as a reference, and by monitoring the movement of the buffer fill position over a given period, the drift rate of clock unsynchronization between client and server can be derived and, therefore, the client's clock can be adjusted to synchronize with the server's clock based on the derived drift. However, Xu fails to anticipate the use of counting the number of clock pulses of a server or client clock signal used to encode or decode the audio information or the video information on the basis of a power source synchronous pulse signal synchronized with the power source frequency of electric power supplied to the server or client device.

Martinez clearly shows a transmitting (server) device and a receiving device are both phase locked to the frequency of a power line signal either by direct connection or a frequency voltage induced into a radio device from a nearby power lines to thereby provide means to precisely synchronize the transmitting device radio carrier signal and/ or digital clock stream with the receiving device to achieve very high signal transmission reliability. However,

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Martinez fails to anticipate the use of transmission of audio or video information, which is encoded at a server and decoded at a client, and also the use of counting the number of clock pulses of a server or client clock signal used to encode or decode the audio information or the video information on the basis of a power source synchronous pulse signal synchronized with the power source frequency of electric power supplied to the server or client device.

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 - b. **Shuttleworth (U.S. Patent # 7,043,313 B1)** discloses Clock System Capable of Synchronizing Clock Frequencies of Power Processing Devices and Digital Signal Processing Devices

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c. Litwin, JR. et al. (U.S. Patent Application Publication # 2002/0140547 A1)

discloses Clock Synchronization over a Powerline Modem Network for
Multiple Devices

d. Kishigami et al. (U.S. Patent # 5,787,132) discloses Data Communication

System Having Improved Synchronization Capability

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Allahyar Kasraian
A.K./ak

March 30, 2007